

**ABSTRACT**

A demodulation circuit for CDMA mobile communications systems ~~prevents the degradation of reception qualities by selecting and assigning variation free, stable paths out of received paths. When a delay profile is calculated based on received signals and those paths with a large power are selected from the delay profile and assigned to the finger portion,~~ includes a path comparison portion that detects whether one and the same path has been successively detected or not, and a calculation portion that calculates the timing variation between currently detected path and previously detected path when one and the same path is detected successively, ~~and a~~ A path timing determination portion assigns a new path to the finger portion in place of a path with a maximum variation if the variation of the path with a maximum variation within the paths already assigned to the finger portion has the variation larger than/equal to a variation threshold when a new path which is not assigned to the finger portion and of which level is higher than/equal to a predetermined assignment threshold is detected.

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A demodulation circuit for CDMA mobile communications systems includes a path comparison portion that detects whether one and the same path has been successively detected or not, and a calculation portion that calculates the timing variation between currently detected path and previously detected path when one and the same path is detected successively. A path timing determination portion assigns a new path to the finger portion in place of a path with a maximum variation if the variation of the path with a maximum variation within the paths already assigned to the finger portion has the variation larger than/equal to a variation threshold when a new path which is not assigned to the finger portion and of which level is higher than/equal to a predetermined assignment threshold is detected.